3 Royal Institute of International Affairs U-4 (no date) 1954 M1 Middle East
Iraq MH1

yield of nearly twice that of wheat, it is more popular with farmers. In normal years Iraq grows sufficient barley to ensure an exportable surplus of some 300,000 tons. The main importers in 1950 were Holland and Great Britain.

Rice is grown mainly in the marshes of the Lower Tigris and Euphrates near Amara and Suq ash-Shuyukh and in the Hilla and Diwaniya *liwas*, especially in the marshes around Shamiya. A small quantity is grown by irrigation in the valleys of the Kurdish areas. It is sown as a summer crop for harvesting between September and November. Its yield and price are usually higher than those of wheat or barley, but it is more extravagant of water and its cultivation is therefore restricted by law (1932). Before the war there was a small exportable surplus, but exports in recent years have been confined to limited amounts of the inferior qualities.

Dates. Iraqi dates constitute four-fifths of the world's production; the Government has a special interest in their cultivation and marketing. The Shatt al-Arab area above Basra, where growing, packing, and marketing are managed by a Date Board representing all interests, has 18 million[1] trees; the other main producing area in Iraq is on the Euphrates upstream from Nasiriya. Date-palms need a plentiful supply of water, but its quality and that of the soil is less important. Some 350 varieties of date are said to be grown in Iraq, of which only four are usually exported in quantity. Total annual production in normal times averages about 288,000 tons; of this about half is exported and half consumed within Iraq, either as food—dates are a staple item of diet—in natural form or as date syrup, or as raw material for the spirit industry. Of the by-products, the fibrous trunk is used for rope-making and the powdered stone for cattle fodder. Selection and packing for export are improving greatly under the supervision of the Government Date Board. The main importers of Iraqi dates were, in 1950, India, the United States, Egypt, Great Britain, Canada, and Pakistan.

Forests

The forests of Iraq, covering an area of 18,000 square kilometres, are of variable density. They were at one time far denser and more extensive, but have been and are still being reduced by shifting cultivation, fires, and uncontrolled cutting and grazing. The Forestry Department of the Ministry of Agriculture is undertaking a programme of conservation and afforestation, which will safeguard the soil, increase timber and

[1] The official figure; the IBRD report gives a figure of only 9·7 million.

5: Harrison D-4 (1912-1924) 1924 M1 Middle East
Iraq MH1

[Marsh Arabs]

THE ARABS OF MESOPOTAMIA 111

It is customary to abuse the Turkish Government as responsible for these conditions. That government has much to answer for, but it is doubtful whether even the efficient and benevolent rule of the British will improve the lot of the date gardener a great deal so long as the present system remains unchanged. The trouble is that the owner has no contact with his gardener except through his agent, and is coerced by no intelligent and effective public sentiment. Whether in Turkish or British territory, he lives under a government built on the theory that contracts made in good faith must be executed at all costs and that knows no redress for the gardener except that he seek employment elsewhere, a thing that is very difficult to do. The adjustments possible in the oases of Arabia, where it is the function of the sheikh to modify oppressive contracts and where it is understood that an unfavorable reputation will speedily endanger the life of the land-owner, are out of the question in Mesopotamia.

In addition to the date gardeners who cultivate the irrigated land along the last hundred miles of the Arab River from Gurna to the Gulf, there are also a number of so-called Marsh Arabs along the rivers in Lower Mesopotamia, who raise rice, wheat and barley on land that is overflowed in the spring when water is high. Rice is their favorite crop and the one that is most reliable. In that country the visitor is surprised at being served with loaves of bread of the usual flat pancake-shape but snowy white instead of the light brown color of the whole wheat flour which is universal over all Arabia. I asked my host with much surprise whether he imported his flour from Bombay and he laughed. He hardly knew where

Iraq MH1

[Marsh Arabs]

112 THE ARAB AT HOME

243 Bombay was. "No," he said, "here we make our bread
262 from rice flour. When the wheat crop is a failure, as in the past year, we have almost nothing else."

312 These overflow districts, which are marshes in the spring when the rivers overflow, dry down to hard soil later in the year. To keep the water high for a few weeks longer than it would naturally remain so, temporary dams are constructed across some of the smaller streams, leaving an opening to allow boats to pass and water to run through. These dams persist in the face
[342] of a strong current in a way that is surprising. Mud, tree branches, mats, soil and the like seem to be the only building material, for there is no stone within hundreds of
[476] miles. The dams require a large amount of labor, and of course are coöperative enterprises. Possibly because of this necessity for coöperative effort, the Marsh Arab communities appear to have developed a good degree of community spirit.

361 Like their race everywhere, these Marsh Arabs do not live in isolated individual houses in the midst of their fields but collect in larger or smaller towns, some of them of considerable size. These towns are located usually in the fork of a river, or where several streams come together. In Lower Mesopotamia there are many small channels that carry water either out of the main
501 river or into it. The Marsh Arabs get about in picturesque, high-prowed, black river boats, black because they are covered with a thick coat of native bitumen which wells from the ground in one or two places in Mesopo-
135] tamia and is an indication, so the engineers tell us, that petroleum is to be found in that country. These river boats, which are the one means of transportation, are built somewhat on the lines of a canoe and take consid-

[along the last 100 miles of the Arab river from Gurna to the Gulf -- Hualy-t]

5: Harrison D-4 (1912-1924) 1924 M1 Middle East
Iraq MH1
Iraq Bedouin MH8

I 438 245

As compared with the southern district the northern part of Mesopotamia grows only a small amount of dates. There are a few gardens around each city, which furnish fresh dates for local consumption during the season, but in this region water has to be raised from the river to the ground level by animals, by the method in use in Arabia. The gardens are small and confined to the river-side and are of no real significance in the economic support of the country. These northern regions are not devoid of rainfall, and a meager return is secured by sowing wheat and barley on unirrigated land. Such cultivation, however, is uncertain, and in about one year out of every three the crop is a dead failure.

I 243

I 162 B 461 233 511

The great mass of the people are nomadic or semi-nomadic. Everywhere there can be found pasturage for the nomad's flocks and herds and wells for the watering of stock. Many of the Bedouin nomads engage in agriculture occasionally in good seasons. Even among those who refuse to degrade themselves by becoming agriculturists of any degree, the standards of life are considerably higher than among the Bedouins of Central Arabia. The supply of forage is more abundant, and their flocks of camels and sheep and goats are very large. These nomads have better clothes, very much more abundant food, and in every way live a more tolerable life than that of their brothers in the Central Arabian desert. Horses are common in Mesopotamia. They are a luxury but not such a tax on the resources of the owner as farther south, for there are always forage and water for them. Every Arab of position expects to own and ride one; otherwise he loses caste. Arab horses are beautiful animals and are trained as household pets, much as a fine dog is trained with us. They are ridden without saddle

B 231 [556] 492

312 to the irrigation department, and the procedure to be followed
681 for their recovery though covered by Article 19 is now done
694 through the Mutassarrifs concerned in accordance with the Law for the Collection of Debts Due to the Government No. 43 of 23 April 1931 as amended by subsequent Laws.

5) Rice Cultivation

243 The Law for Rice Cultivation No. 23 of 31 March 1932, as
656 subsequently amended by Law 53 of 15 May 1940, prohibits or restricts in areas defined by Regulation issued from time to time, the cultivation of rice for health reasons, economy in the use of water or soil conservation (Article 1).

Rice cultivation could only be conducted under special license (Article 4), and areas in which rice cultivation is restricted shall be fixed by Regulation (Article 2).

Regulation No. 34 of 28 August 1944, defines the regions in which rice cultivation is prohibited and also fixes areas in masharas for regions where rice could be cultivated.

The Minister of Agriculture shall decide the manner in which areas for rice cultivation alloted to each Liwa are to be distributed, and the mutassarrif concerned shall issue a notice inviting those interested to apply for the necessary permits.

Requests must be submitted to the qusimmaqam of the qadha in which the lands are situated, and the mutassarrif, to whom the requests are transferred shall issue the permits, with the requirements of the Irrigation Department. The minimum distance between rice fields and inhabited localities shall be three kilometres. The permits are non-transferable and are strictly limited to the persons and to the plot of land and irrigation works stated on them. The permit holder agrees to the rotation of water supplies determined by the Irrigation Department, and he accepts responsibility for all shortage of irrigation supply with consequent damage to crops.

6) Offences and Penalties under the Law for Rice Cultivation

243 It is forbidden for any person to exceed the area for rice
681 cultivation fixed in the permits, or to cultivate without permit in prohibited and restricted areas. Contraveners shall be fined

ID. 1/500 for every mashara of land cultivated with rice without a permit or in excess of the permitted areas (Article 5). I 243 681

7. Forcible Assistance Law

In addition to the provision of Article 13 of the Irrigation and Embankments Law for emergency requisition of labor, the Ministry of Interior may under the Forcible Assistance Law No. 27 of 31 March 1923, as subsequently amended by Law No. 24 of 30 March 1936, in sudden and unforeseen circumstances such as water floods, fire, locusts, etc. authorise the mutassarrifs with the power of collecting and employing labor at rates to be prescribed by the Government. 466

Every laborer who contravenes the order shall be forcibly taken to the place of the work and shall afterwards be punished with imprisonment not exceeding one month or a fine not exceeding Rs. 100.

Persons having jurisdiction to collect laborers who refuse to supply the necessary number of labor or to give the necessary assistance shall upon conviction be liable to imprisonment not exceeding 6 months or to a fine not exceeding Rs. 1000 or to both imprisonment and fine.

JORDAN

J

Since the Hashimite Kingdom of Jordan gained its independence from the Ottoman Empire, the Mejelle Civil Code has remained in force there. Subsequently, another law supplementing water legislation, No. 38 dated 8 August 1946 (15 Muharram 1366) has been enacted. Jordan authorities are considering amending this latter law at the present time, but the draft is still under study by the interested departments. 1/ This law consists of five sections with 41 articles. 671 312

1/Schweng, L. D. Expanded Technical Assistance Program of the Food and Agriculture Organization of the United Nations, Rome, Italy. Private letter.

35: Hooper and Field S-5 (1934) 1937 MAI Iran MAI
Iraq MHI

I-I
278*
824*

Ph. Ind. 2: 392; Pyman, Journ. Chem. Soc. 1919; Fl. Br. Ind. 3: 645.

W.H.M.M. 150793; K.B. 320.

This small, deciduous tree is found in the tropical Himalayas from the Chenab westward, and throughout the drier forests of India to Travancore and Malacca. Samples of the seed came from Hamadan and Tehran, showing that the Indian drug is well established in Iran. The seeds are narrowly linear-oblong, glabrous, and brown, about 12 mm. long. They have a bitter taste due to the presence of the alkaloid wrightine (conessine), which acts like emetine. The seeds are reputed to have tonic and aphrodisiac properties.

• 243
262
824*

Hordeum vulgare L. (Gramineae)

جو سفید جو سیاه

Jau, Jōyi safīd (white), Jōyi siyāh (black) (Iraq); Jao (Sind); Jū (Kurd.); Jav (Hind.); barley.

Field 59, 71, 275; 11, 32, 44, 46, 70 (Iraq).

Barley is the most widely cultivated grain and forage crop throughout Iraq. The variety *hexastichon*, or six-rowed barley, has been found in the earliest Egyptian monuments and is the variety most frequently grown in India and Iraq. Early sown barley provides the greater part of the winter grazing in the irrigated areas; horses and other animals are also fed on the grain. Local barleys yield well, but are generally unsuitable for malting. The collection includes specimens of white and black barley, the varieties *distichon*, *hexastichon*, and *erectum*, and the Alleidum barley of Iraq. Pearl barley is imported from Europe and is obtainable in most Eastern bazaars. Mason quotes a saying in Iran, "What has disease to do with men who live upon barley-bread and buttermilk?"

Iraq
243
824*

Guest (p. 46) gives the following information concerning barley:

"*Hordeum* (Gramineae). Barley grass, Barley. Sha'ir, etc.

"*H. murinum* L., Wall Barley or Barley grass. Sha'irah, Shuwairib, Sha'ur, etc. Small tufted annual grass with a flattened inflorescence like a miniature barley. Widely distributed in fields, on channels and ditches, by waysides and in waste places. March–April. In maturity it is a fodder plant of rather low feeding value, though the young growth is nutritious. The seeds are barbed and the awns serrated; hence the mature plants are likely to injure the tender parts of stock.

35₂ Hooper and Field S-5 (1934) 1937 MAI Iran MAI
Iraq MHI

Iraq
243 •
262
824*

"*H. bulbosum* L. Abu Suwaif, Gizar Gia (Kurd.), etc. A tall perennial barley grass with a bulbous root. A common weed in cereal fields on the upper plains and in the valleys of Kurdistan, often projecting conspicuously above the ears of the crop. March–May. It is a useful fodder plant sometimes preserved for winter feeding. Children often eat the bulbous roots.

"*H. spontaneum* K. Koch. Tall grass similar to the above. Common on the rocky slopes of Jebel Sinjar and other hills. April–May.

"*H. sativum* Pers. (*H. vulgare* L.). Sha'ir, Arpā (Turk.), Jū (Kurd.). The most widely cultivated grain and forage crop throughout Iraq; with wheat, rice, and dates it forms the staple food of the majority of the inhabitants. Early-sown barley provides the greater part of the winter grazing in the irrigated areas; horses and other animals are also fed on the grain. The climate is unfavorable for the slow ripening which is necessary to produce good malting barley, since the summer comes on very suddenly, almost before the spring is over. Two-rowed barley (var. *distichon*) is generally known as Sha'ir Abū Sūwaif or Sha'ir Abū Sikkatain; six-rowed barley (var. *hexastichon*) as Sha'ir Sparqalān."

—In the collections of the Rustam Agricultural Experimental Farm at Hinaidi near Baghdad, Iraq, the following varieties of barley are represented:

(*a*) *H. sativum* dest. erect., *nigrum*. Sha'ir Abū Sūwaif. Rustam No. 127. Field 23A. Origin Al Mahmudiya, Iraq.

(*b*) *H. sativum* Pers. (*H. vulgare* L.) *albidum*. Rustam No. 128. Field 24A. Origin Biskra.

(*c*) *H sativum distichon*. Chilian barley. Rustam No. 160. Field 25A. Origin Australia.

(*d*) *H. hexastichon albidum*. Circlan barley. Rustam No. 217. Field 22A. Origin Iraq.

(*e*) *H. sativum albidum*. California barley. Rustam No. 150. Field 20A.

(*f*) *H. sativum albidum*. Sha'ir. Rustam No. 218. Field 21A. Origin Iraq. (H.F.)

I-I
824*
278*

Hyoscyamus reticulatus L. (Solanaceae)

بزر بنج

Bazr-i-banj (Teh., Ham.); Kohi bang (Bal.); Banj barri (Iraq); Benj (Ar.); Bango (Port.); henbane seeds.

35₂ Hooper and Field 8-5 (1934) 1937 MAI Iran MAI
Iraq MHI

I-I
824*
278*

scalding in water and then dried. They are hard, horny, whitish, opaque or translucent, branching tubers, mucilaginous when placed in water. A gruel made of these roots is esteemed as a nervine tonic, demulcent, and nutritive.—As an infusion it is given to relieve hoarseness (H.F.).

Oryza sativa L. (Gramineae)

824*
243 •
262

برنج صدری

Birinj-i-sadri, Berij sadri Gilan (Teh.); Timan (Iraq); Ruzz (Ar.); Shilib, Pirinj (Turk.); Chaltuk (Kurd.); rice grain.

Field 58, 72; 15, 18, 20, 34 (Iraq).

"Rice is cultivated as a summer crop over immense areas, especially in the southern marshes, also in the valleys of Kurdistan and on the flow canals of certain regions in lower Iraq" (G.). There are three main types of the crop represented in the above specimens from Iraq: (1) Harfi or early-sown, (2) Affi or late-sown, and (3) Shittāl or transplanted.

Timan is the hulled rice of Iraq. The two samples from Tehran are of fine, white, table rice.

824*
243
262

Panicum miliaceum L. (Gramineae)

ارزن

Arzan (Pers.); Dukhn (Iraq); Chīna (Hind., Sans.); millet grain.

Field 57, 106A; 22, 80 (Iraq).

Common millet is cultivated as a summer crop in Iraq, especially along the Shatt-al-Hai. The grain can be cooked and eaten whole or made into bread. It is commonly used in the form of porridge. The green plant is an excellent fodder for animals.—The seeds provide feed for chickens (H.F.).

[246]

Papaver somniferum L. (Papaveraceae)

824*
278*
276

کوکنار

Kavl-a-kūknār, Pōst-a-kūknār (Pers., Afg.); poppy heads.

تخم خشخاش

Tukhm-i-khash khāsh; Tukhm-i-shaga'ig (Ham.); Kishkash (Ar.); poppy seeds.

Ait.; Post; Ph. Ind. 1: 73.

Field 48, 64, 81A, 82A, 185; W.H.M.M. 150835, 150911; K.B. 329.

35: Hooper and Field S-5 (1934) 1937 MAI Iran MAI
Iraq MIII

I-I
829*
278*

medicine for its stimulant (irritant) and antiseptic action in the genito-urinary tract.

Saussurea Lappa C. B. Clarke (Compositae)

قسط

Qust-i-talkh, Butinak (Teh.); Patchak (Beng.); Kutha Kushta patchuk (Hind.); Costum amarum (Ph. Pers.); Indian costus.

Ait.; Fl. Br. Ind. 3: 376; Schl.; Ph. Ind. 2: 296.

W.H.M.M. 150813; K.B. 338.

The soft, fragrant, whitish root comes from plants grown as a Crown monopoly in Kashmir, and is exported to Iran, India, and China. This ancient and valuable drug was called Arabian costus as it was carried to Turkey and Europe by the Arabs. The root occurs in cylindrical or twisted pieces, light colored, with an agreeable odor and a bitter and biting aftertaste. A second sample of Kust from Hamadan was a smaller root, spirally twisted and lighter in color. Chob-i-kut is the name of a plant used to adulterate costus root in Afghanistan. Various chemical principles have been separated from the root, some of which account for the violet-like odor: Costulactone isomeric with alantolactone costus acid, dehydrocostus lactone, and costol. Costus root is prescribed externally and internally for various complaints, and is taken locally to ward off the effects of snake and animal bites.

Semecarpus Anacardium L. (Anacardiaceae)

بلادر

Balādur (Teh., Isf.); Bhela, Bhilava (Hind.); marking nut.

Field 439; W.H.M.M. 150873.

The marking nut tree inhabits the hotter part of India, Ceylon, and Burma. The black, obliquely cordate nuts contain within the pericarp a black, resinous, viscid, acrid juice which is used as marking ink. A local caustic and vesicant, the juice, when applied to the skin, causes intense pain and swelling. In small quantities, it is given for relief in rheumatic pains and leprous affections.—Prepared like tea, it is also taken to relieve flatulence following severe piles (H.F.).

824*
278*
263
246
• 243

Sesamum indicum L. (Pedaliaceae)

سمسم

Simsim (Iraq); Kunjad (Kurd.); Kundij (Turk.); Til, Jinjili, Gingelly (Hind.); til or sesame seed.

35₂ Hooper and Field S-5 (1934) 1937 MAI Iran MAI
Iraq MHI

Field 128A, 52 (Iraq). I-I

Sesame is widely cultivated as a summer crop. The seeds, white, brown, or black, are used for garnishing cakes and sweetmeats and are eaten by the poor in times of scarcity. They contain about 50 per cent of a fixed oil which is an excellent substitute for olive oil or other salad oil in cooking. The oil cake is a cattle food. The oil is also the basis of most of the fragrant or scented oils—medicated oils prepared with various vegetable drugs. 824* 278* 263 246 243 •

In Baghdad, Rashi is the name given to a preparation of ground sesame seed after it has been soaked and roasted, which is used as an emollient, Rahishi (Ar.), Arwah-i-kunjad (Pers.).

Sesbania aculeata Poir. (Leguminosae) 824* 278*

Sesbaniyah (Iraq); Saisaban (Egy.); Rasin (Hind.); Akar, Majandri (Bal.); Jayanti (Beng.); Sesbania seeds.

Field 47 (Iraq).

The plant has been introduced into Iraq and planted for windbreaks. The seeds are sold in bazaars throughout India and Iran. They are dull grayish brown, oblong, 2 by 4 mm., smooth, hard, and bitter to the taste. The Hindus have a superstition that sight of the seeds will remove the pain of scorpion stings. They are used medicinally on account of their astringent properties. The seeds are beaten into a paste which is applied locally to cure eruptions.

Sisymbrium Sophia L. (Cruciferae)

خاکشیرین

Khākshīr, Khākshīr-i-shīrīn (Teh.); Towdri, Khub-kalan, Khaksi (Hind.); the seeds.

Ait.; Schl.; Boiss. 1: 216; Ph. Ind. 1: 118, 121.

Field 4 (Isf.), 50; W.H.M.M. 150712.

These seeds resemble in size, shape, and color the drug Tukhm-i-khākshīr talkh, the bitter Khākshīr (*Erysimum* sp.), except that they are dull and not shiny. There are several kinds of cruciferous seeds known as "Towdri": pale, light brown, red, and black. The seed of *Lepidium Iberis* L., the Kasis of Iran, is one of them, and the seeds of *Matthiola incana* R. Br., from the Punjab and Sind, is another. The seeds are small, yellowish brown, 1 mm. in length, and become coated with transparent mucilage when placed in water. The drug is considered aphrodisiac, "fattening the body and purifying the blood." [832]

35: Hooper and Field S-5 (1934) 1937 MAI Iran MAI
Iraq MHI

I-I

Solanum xanthocarpum Schrad. & Wendl. and **S. Melongena** L. (Solanaceae) 824* 278*

تخم باد نجان

Tukhm-i-bādanjān (Teh.); seeds of the wild eggplant.

Field 261.

These plants occur throughout India. The stem and leaves are armed with strong prickles; the flowers are in racemes; and the berries are spherical, smooth, and marked with variegated, green and yellow stripes. The seeds are reniform, 2 mm. in diameter, compressed, and light brown in color. They are expectorant in asthma and catarrh.

Sorghum vulgare Pers. and **Andropogon Sorghum** Brot. (Gramineae) 824* 262 243 •

دهوره

Dhurah, Idhrah baidha (Ar.); Dari, Gowar (Hind.); Baryadh dari (Turk.); Zuratspi (Kurd.); great millet.

Field 111 (Iraq).

Giant millet is cultivated extensively as an irrigated summer cereal crop in the riverain areas between Basra and Mosul. During the past few years there has been an annual export of grain from Iraq amounting to between 30,000 and 50,000 tons. The grain is well liked by the people as a food (G.).

Spinacia oleracea L. (Chenopodiaceae) 824* 278*

تخم اسپناج

Tukhm-i-ispanāj (Teh.); IspināKh (Iraq); Sag Palak (Hind.); spinach seeds. 262

Field 45; W.H.M.M. 150912.

Spinach is cultivated in kitchen gardens in Iraq and Iran for its large, fleshy leaves which are eaten as a vegetable. It is sometimes confused with spinach beet (*Beta vulgaris* var.), which is much used as a substitute for spinach. The fruits are in green clusters, triangular, each angle terminating in two or more spines, the surface rugose and wrinkled. The fruits contain mucilage and alkaline nitrates, and are demulcent and diuretic, employed for fever and inflammation of the bowels.

The seeds of *Chenopodium capitatum* Aschers. are also sold under the above vernacular names.

35: Hooper and Field S-5 (1934) 1937 MAI Iran MAI
Iraq MHI

I-I
824*
278*

are occasionally used for poultices and in curries. The seeds are mucilaginous and have been known since antiquity for their medicinal properties, which are stomachic and cordial.—As an infusion they are given for menorrhagia (H.F.).

Triticum vulgare Vill. (Gramineae)

824*
262
243 •
278*

گندم سفید

Gandum-i-safīd, Gandum-ābī (Teh.); Kanim (Kurd.); Gehun (Hind.); Godumai (Tam.); wheat grains.

Nishāstah (Teh.); wheat starch.

Field 160, 273; 9, 26, 27, 35, 40, 42, 49, 56 (Iraq); 57A, 58A, 59A, 60A, 61A, 62A.

Wheat is one of the principal winter crops grown in cultivated areas throughout the country. Herodotus (III, 22) mentions only wheat as the staple food of the Persians at the time of Cambyses. Modern Irani primitive physicians use wheat starch as a dusting powder to allay the pain of burns and inflammation.

Iraq
824*
243

Guest (p. 102) records the following information: "*Triticum* (Gramineae). Wheat. Hintah, Bughdāi (Turk.), Ganim (Kurd.). One of the two principal winter crops grown extensively in the cultivated areas throughout the country; the other is barley. There are several indigenous spp. and many hundreds of local varieties. Wheat is grown on irrigation in the riverain areas of Lower Iraq and, more extensively, on rain in the 'daim' areas of the upper plains; it is also grown in the valleys of Kurdistan (up to alt. about 2,000 m.). There is in normal years a considerable export of grain from Iraq, denoting a surplus above the requirements of the inhabitants. Formerly, the grain had a bad name in the trade owing to the dirt and other impurities which it contained; it was classed as 'Persian' and fetched a poor price in the world markets. Of recent years a great improvement has taken place in the cleanliness and quality of the grain exported from this country and it is confidently hoped to establish a name for Iraqi wheat. To this end legislation has recently been introduced to encourage the propagation of 'Ajībah wheat (one of the Punjab wheats), which was issued by the Department of Agriculture a few years ago after trials had proved it to be superior to any other local or imported variety.

"Bread Wheat, *T. vulgare* Vill. Almost the only kind of wheat grown on irrigation in the riverain areas of Lower Iraq. In certain years it suffers badly from rust disease which takes a heavy toll of

35: Hooper and Field 8-5 (1934) 1937 MAI Iran Iraq

Iraq 824* 243

the crop. This is one of the reasons for the growing popularity of the newly-introduced 'Ajibah, a variety highly resistant to rust. A certain amount of bread wheat is also grown on rain in the 'daim' areas of the north, where it is known as Hintah Qandahāri (*N.*).

"Macaroni Wheat, *T. durum* Desf. Hintah Khushnah. Much the greater portion of the 'daim' wheat in the north is of this type. It gives a higher yield, has greater resistance to drought and is more immune to rust than the local bread wheats. The grain of this type of wheat is harder and larger than the grain of bread wheat; but the bread made from it is of a poor quality. It is largely eaten in the form of Burghul (Kurd.), a kind of local porridge.

"Khorasan Wheat, *T. orientale*, and Polish Wheat, *T. polonicum*. Both these spp. have long hard grains known as Sinn-aj-jamal or Sinn-al-fil. Sometimes cultivated in the north.

"Dwarf Wheat, *T. compactum* L. Hintah walwal. One or two wild spp. of *Triticum* and of the grass, *Aegilops* (now generally included as a subsp. of this genus), are known to occur in Iraq. Of these the following may be mentioned:

"*T. dicoccoides* Koern. A specimen has been received from Jebel Sinjar, where it is said to grow on the hillside."

In the collections of the Rustam Agricultural Experimental Farm at Hinaidi near Baghdad, Iraq, the following varieties of wheat are represented:

(*a*) *T. vulgare durum libicum*. Black wheat. Rustam No. 41. Field 15A. Origin Euphrates, Iraq.

(*b*) *T. vulgare erythrolenca*. Punjab B8. Rustam No. 48. Field 18A. Origin Punjab, India.

(*c*) *T. vulgare albidum*. Linga No. 8. Rustam No. 141. Field 17A. Origin Australia.

(*d*) *T. vulgare leucospermum*. U.S.A. Rustam No. 207. Field 16A. Origin Pusa, India.

(*e*) *T. vulgare turcicum*. Ajibak. Punjab No. 8A. Rustam No. 210. Field 19A. Origin Punjab, India.

(*f*) *T. vulgare albidum*. Clarendon wheat K. Rustam No. 602. Field 14A. Origin Australia.

Iraq 824* 243 172

During excavations at Kish and Jemdet Nasr in Iraq by the Field Museum–Oxford University Joint Expedition, samples of wheat and barley were found in pottery vessels belonging to the period approximately three thousand years before the Christian era. These grains,

35: Hooper and Field 8-5 (1934) 1937 MAI Iran MAI
Iraq MHI

Iraq
824*
243 •
172
I-I
[113]

preserved through being burnt, are difficult to identify with regard to their species. A summary of this discussion has been published by Henry Field, "Ancient Wheat and Barley from Kish, Mesopotamia," *Amer. Anthr.*, 34, No. 2, pp. 308–309. For further information on this subject the reader is referred to various publications by Nikolai Vavilov, Institute of Plant Industry, Leningrad, U.S.S.R.

824*
262

Tulipa montana Lindl. (Liliaceae)

فریونه

Fraiyōnah (Iraq); Lāla (Afg.); Govarikh, Wodak (Bal.); bulbs.

Field 54.

The bulbs of this tulip of Iran, Baluchistan, and Afghanistan have brown, coppery skins. They are sold in the Mosul market as food (G.). The bulbs are eaten also in Baluchistan, where the leaves are a fodder for goats.

824*
278*

Uncaria Gambier Roxb. (Rubiaceae)

کات گلابی

Kāt-i-gulābī (Teh.); Chinai-katha (Bom.); extract, pale catechu.

Field 208.

This is a specimen of the pale catechu of commerce obtained from Singapore. In the form of cubes, 1 inch across, it is prepared from the leaves and stalks of the plant grown in the Malay States. It is very astringent, as it contains both catechin and tannin. In Tehran it is prescribed for coughs.

Veratrum album L. (Liliaceae)

کندش

Kundush (Ham., Teh.); Kondochi (Schl.); hellebore root.

Boiss. 5: 171.

Field 221; K.B. 343.

White hellebore is a plant of Europe, Central Asia, and Japan. The root is mentioned as a drug in the herbals of Hippocrates and Galen. The rhizome is dark brown, cylindrical or slightly tapering, 2.5 cm. in diameter, with numerous scars of broken rootlets, whitish within. It contains a poisonous alkaloid, jervine. The root is one of the Irani poisons, and is used only externally, as a paste for headache and facial neuralgia.—It is also applied as a relief from nasal catarrh (H.F.).